



EFFECTIVE: SEPTEMBER 2004 CURRICULUM GUIDELINES

A: Division: **INSTRUCTIONAL** Effective Date: **SEPTEMBER 2004**
B: Department / **GEOGRAPHY** Revision New Course
Program Area: **FACULTY OF HUMANITIES &
SOCIAL SCIENCES**
If Revision, Section(s) **C, H**
Revised:
Date of Previous Revision: **JANUARY 2004**
Date of Current Revision: **APRIL 2004**

C: **GEOG 2270** D: **GEOGRAPHIC INFORMATION SYSTEMS** E: **3**
(GIS)

Subject & Course No.	Descriptive Title	Semester Credits
F:	Calendar Description: Geographic Information Systems (GIS) are a set of powerful computerized tools designed to work with digital data referenced by geographic coordinates to store, retrieve, analyze and display information. With a GIS an analyst can explore complex geographic relationships and discover patterns that were previously undetectable through conventional methods. GIS analysis has become important in	

M: Course Objectives / Learning Outcomes

At the conclusion of the course the successful student will be able to:

1. Describe the components and uses of an effective GIS.
2. Describe the characteristics of spatial data and explain how projection, coordinate and datum systems impact GIS precision and accuracy.
3. Use the components of a GIS to input data, create topology, analyse data and produce maps to communicate the results of the analyses.
- 4.

N. Course Content Cont'd.

8. Introduction to Remote Sensing
 - a. Data Acquisition
 - b. Satellite Characteristics
 - c. Electromagnetic Radiation
 - d. Active vs. Passive Sensors
 - e. Spatial Resolution

O: Methods of Instruction

The course will employ a variety of instructional methods to accomplish its objectives, including some of the following:

- Lecture
- Labs